

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

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19. Juli 2004

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

16-07-2004

Applicant's or agent's file reference

50970 WO

IMPORTANT NOTIFICATION

International application No.

PCT/IB2002/001518

International filing date (day/month/year)

06-05-2002

Priority date (day/month/year)

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Applicant

Nokia Corporation
et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| | | |
|--|---|--------------------------------|
| Applicant's or agent's file reference 50970 | FOR FURTHER ACTION See Form PCT/IPEA/416 | |
| International application No. PCT/IB2002/001518 | International filing date (day/month/year) 06-05-2002 | Priority date (day/month/year) |
| International Patent Classification (IPC) or national classification and IPC H04Q 7/22 | | |
| Applicant Nokia Corporation et al | | |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:
 - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

| | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

| | |
|---|---|
| Date of submission of the demand 16-09-2003 | Date of completion of this report 28-07-2004 |
| Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88 | Authorized officer Peter Hedman/MN Telephone No. +46 8 782 25 00 |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/IB2002/001518

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))
☐ publication of the international application (under Rule 12.4)
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages 1 - 9 _____ as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☒ the claims:

pages _____ as originally filed/furnished

pages* _____ as amended (together with any statement) under Article 19

pages* 10 - 12 received by this Authority on 2004 - 05 - 06

pages* _____ received by this Authority on _____

☐ the drawings:

pages 1 _____ as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (*specify*): _____

☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/IB2002/001518

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|-------------|-----|
| Novelty (N) | Claims | <u>1-16</u> | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | <u>1-16</u> | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | <u>1-16</u> | YES |
| | Claims | | NO |

2. Citations and explanations (Rule 70.7)

The claimed invention relates to a method, a Store-and Forward Entity and software adapted for delivering messages for which an unsuccessful attempt to deliver has been executed at a previous stage. The proposed delivering procedure is achieved by way of providing a presence service. A notification about the attainability of the receiving terminal device is received at a Store-and Forward entity upon discovering that the receiving entity is attainable.

In the international search report the following document was cited and was considered to be of relevant importance:

D1 WO 9926432 A1

The cited document represents the general state of the art. The invention defined in the amended claims 1-16 is not disclosed by this document.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed method of providing detailed differentiated information in order to indicate the acceptance of a message. Nor does the cited prior art lead a person skilled in the art to a software tool, a computer program or a Store-and-Forward Entity which is operating in accordance the method suggested in any of claims 1-8. Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1-16 is novel and is considered to involve an inventive step. The invention is industrially applicable.

Application number: PCT/IB 02/01518
Applicant: Nokia Corporation et al.
Date:

May 03, 2004

New Claims

1. Method for delivering messages to a mobile terminal device in case of an unsuccessful message delivery attempt to said mobile terminal device from a Store-and-Forward Entity (SFE) of a mobile communication network having a presence service, said presence service providing an information about the attainability of said mobile terminal device, characterized by:

- receiving a notification about an unsuccessful delivery attempt of said message, and
- subscribing to said presence service for receipt of notifications about the attainability of said mobile terminal device,
- checking availability information of said mobile terminal device in said presence service for an acceptance of said message by said mobile terminal device,
- initiating a delivery attempt of said message to said mobile terminal device, in accordance with the result of said checking,

wherein said availability information for the acceptance of said messages by said mobile terminal device comprises information selected from a group of: type of message, size of the message, data content of the message, location of said mobile terminal device and willingness of a user of said mobile terminal device to receive a message.

2. Method according to claim 1, further comprising:

- receiving a status change notification message from said presence service about said mobile terminal device having a change of said availability information,
- starting a delivery attempt of said message to said mobile terminal device, in accordance with said received status change notification message.

3. Method according to claim 1 or 2, wherein said message is a multi media message.

4. Method according to anyone of the preceding claims, further comprising receiving of said message to be transmitted to said mobile terminal device.

5. Method according to anyone of the preceding claims, further comprising checking availability information of said mobile terminal device in said presence service for the availability of said mobile terminal device.

6. Method according to anyone of the preceding claims, wherein said availability information for acceptance of said message is depending on properties of said message.

7. Method according to claim 6, wherein said properties are selected from a group comprising: message type, message size, sender type, and sender.

8. Method according to anyone of the preceding claims, wherein said availability information of said mobile terminal device in said presence service can arbitrarily be changed by receiving said presence service status change message from said mobile terminal device.

9. Software tool for performing a delivery attempt of a message to a mobile terminal device in accordance with the information related to the availability status of said mobile terminal device in a communication network, comprising program code means for carrying out the steps of anyone of claims 1 to 8 when said software tool is implemented in a program run on a Store-and-Forward Entity or a network device.

10. Computer program for performing a delivery attempt of a message to a mobile terminal device in accordance with the availability status of said mobile terminal device in a communication network, comprising program code means for carrying out the steps of anyone of claims 1 to 8 when said program is run on a Store-and-Forward Entity or a network device.

11. Computer program product comprising program code means stored on a computer readable medium for carrying out the method of anyone of claims 1 to 8 when said program product is run on a Store-and-Forward Entity or a network device.

12. Store-and-Forward Entity connected to a mobile communication network having a presence service for store-and-forwarding a message to a mobile terminal device, characterized by:

- a component for receiving a notification about an unsuccessful delivery attempt of said message, and
- a component for subscribing to said presence service for receipt of notifications about the attainability status of said mobile terminal device, and
- said presence service, wherein said presence service provides an information about acceptance of said message selected from the group comprising: message type, message size, message content, sender

type, sender, and location of said mobile terminal device.

13. Store-and-Forward Entity according to claim 12, further characterized by:

- a component for checking availability information of a presence service for an acceptance of said message by said mobile phone, and
- a component to initiate a delivery attempt of said message to said mobile terminal device, in accordance with the operation of said checking component.

14. Store-and-Forward Entity according to claim 13, further comprising a component for checking availability information of said presence service for the availability of said mobile terminal device.

15. Store-and-Forward Entity according to claim 13 or 14, further comprising a component for receiving messages to be transmitted to said mobile terminal device.

16. Store-and-Forward Entity according to anyone of the claims 12 to 15, further comprising a component to change said availability information in said presence service of said mobile terminal device according to the reception of a presence service status change message from said mobile terminal device.